

What is claimed is:

1. A heat labile compound having characteristics consistent with that of a protein that inhibits endothelial cell growth and wherein the molecular weight of the compound is from about 18 kD to about 20 kD.
2. A composition comprising the compound of claim 1 and a pharmaceutically acceptable carrier.
3. The composition of claim 2, further comprising an agent selected from the group consisting of anti-angiogenic, anti-tumor or immune enhancing.
4. A process for obtaining an active extract designated ETCa having characteristics consistent with that of a protein that inhibits endothelial cell growth from a composition of *Tricholoma Conglobatum*, comprising homogenizing an effective amount of *Tricholoma Conglobatum* in an effective amount of buffer solution and filtering to collect the active extract designated ETCa.
5. A pharmaceutically active extract obtainable from the process of claim 4.
6. A composition comprising the extract of claim 5 and a pharmaceutically acceptable carrier.
7. The composition of claim 6, further comprising an agent selected from the group consisting of anti-angiogenic, anti-tumor or immune enhancing.
8. A process for obtaining an active fraction ETCb from a composition of *Tricholoma Conglobatum*, comprising the steps of:
  - a) homogenizing an effective amount of *Tricholoma Conglobatum* in an effective amount of buffer solution and filtering; and
  - b) purify by ammonium sulfate fractionization and dialysis to obtain ETCb.
9. A pharmaceutically active extract having characteristics consistent with that of a protein that inhibits endothelial cell growth obtainable from the process of claim 8.
10. A composition comprising the extract of claim 9 and a pharmaceutically

acceptable carrier.

11. The extract of claim 10, further comprising an agent selected from the group consisting of anti-angiogenic, anti-tumor or immune enhancing.

12. A process for preparing a biologically active fraction ATC07 $\alpha$  from a composition of *Tricholoma Conglobatum* comprising the steps of:

- a) homogenizing an effective amount of *Tricholoma Conglobatum* in an effective amount of buffer solution and filtering to collect the supernatant;
- b) concentrating the supernatant; and
- c) isolating a fraction having an optical absorbance at about 210 nm to about 350 nm.

13. A process for preparing a biologically active compound ATC07 $\alpha$  from a composition of *Tricholoma Conglobatum* comprising the steps of:

- a) homogenizing an effective amount of *Tricholoma Conglobatum* in an effective amount of buffer solution and filtering to collect the supernatant;
- b) precipitating the supernatant with an effective amount of ammonium sulfate;
- c) collecting the 35% to 70% ammonium sulfate fraction;
- d) dialyzing against an effective amount of potassium phosphate;
- e) purifying the active fractions by ion exchange column chromatography; and
- f) obtaining the active compound by chromatography to obtain a biologically active extract having an optical absorbance from about 210 nm to about 350 nm.

14. A compound obtainable by the process of claim 12 or 13.

15. The compound of claim 14, further comprising an effective amount of an agent selected from the group consisting of anti-angiogenic, anti-tumor and immune enhancing.

16. A process for preparing a biologically active compound ATC07 $\beta$  from a

composition of *Tricholoma Conglobatum* comprising the steps of:

- a) homogenizing an effective amount of *Tricholoma Conglobatum* in an effective amount of buffer solution and filtering to collect the supernatant;
- b) precipitating the supernatant with an effective amount of ammonium sulfate;
- c) collecting the 35% to 70% fraction;
- d) dialyzing against an effective amount of potassium phosphate;
- e) purifying the active fractions by ion exchange column chromatography to obtain the active fractions ACT70 $\beta$ .

17. A pharmaceutically active fraction obtainable from the process of 16.

18. The fraction of claim 17, further comprising an agent selected from the group consisting of anti-angiogenic, anti-tumor or immune enhancing.

19. The process of claim 16, further comprising separating the fraction of step e) by Hydroxyapatite column chromatography.

20. A pharmaceutically active fraction obtainable from the process of 19.

21. The fraction of claim 20, further comprising an agent selected from the group consisting of anti-angiogenic, anti-tumor or immune enhancing.

22. A method for inhibiting the growth of endothelial cells comprising delivering to the cells an effective amount of an active agent selected from the group consisting of ECTa, ECTb, ATC07 $\alpha$ , ATC07 $\beta$ , ATC07 $\beta$ 1, and ATC07 $\beta$ 2.

23. The method of claim 22, further comprising delivering to the cells an effective amount of an agent selected from the group consisting of anti-angiogenic, anti-tumor or immune enhancing.

24. A method of inhibiting vascularization in a tissue comprising delivering to the tissue an effective amount of an active agent selected from the group consisting of ECTa, ECTb, ATC07 $\alpha$ , ATC07 $\beta$ , ATC07 $\beta$ 1, and ATC07 $\beta$ 2.

25. The method of claim 24, further comprising delivering to the cells an effective amount of an agent selected from the group consisting of anti-angiogenic, anti-tumor or immune enhancing.

26. A method of treating a disorder associated with pathological neovascularization or endothelial cell growth in a subject, comprising administering to a subject a therapeutically effective amount of an active agent selected from the group consisting of ECTa, ECTb, ATC07 $\alpha$ , ATC07 $\beta$ , ATC07 $\beta$ 1, and ATC07 $\beta$ 2.

27. The method of claim 26, further comprising delivering to the cells an effective amount of an agent selected from the group consisting of anti-angiogenic, anti-tumor or immune enhancing.

28. The method of claim 26, wherein the disorder is selected from the group consisting of cancer, arthritic conditions, neovascular-based dermatological conditions, diabetic retinopathy, Kaposi's Sarcoma, age-related macular degeneration, restenosis, telangiectasia, glaucoma, keloids, corneal graft rejection, wound granularization, angiofibroma, Osler-Webber Syndrome, myocardial angiogenesis and scleroderma.

29. The method of claim 28, wherein the disorder is an arthritic condition selected from the group consisting of rheumatoid arthritis, psoriatic arthritis and osteoarthritis.

30. The method of claim 26, wherein the subject is an animal.

31. The method of claim 30, wherein the animal is selected from the group consisting of a pet, a farm animal or a human patient.

32. A method of treating a disorder associated with pathological neovascularization or endothelial cell growth in a subject, comprising administering to a subject a therapeutically effective amount of agent selected from the group consisting of ECTa, ECTb, ATC07 $\alpha$ , ATC07 $\beta$ , ATC07 $\beta$ 1, and ATC07 $\beta$ 2.

33. The method of claim 30, further comprising delivering to the cells an effective amount of an agent selected from the group consisting of anti-angiogenic, anti-tumor or immune enhancing.

34. A method for screening for a therapeutic agent for inhibiting neovascularization

or endothelial cell growth comprising the steps of:

- a) contacting the agent with a suitable cell or tissue sample;
- b) contacting a separate sample of the suitable cell or tissue sample with a therapeutically effective amount of an agent selected from the group consisting of ECTa, ECTb, ATC07 $\alpha$ , ATC07 $\beta$ , ATC07 $\beta$ 1, and ATC07 $\beta$ 2; and
- c) comparing the growth of the sample of step (a) with the growth of the sample of step (b), and wherein any agent of step (a) that inhibits the growth to the same or similar extent as the sample of step (b) is a therapeutic agent for inhibiting neovascularization or the growth of endothelial cells.

35. The method of claim 34, wherein the therapeutically effective amount of the extract of step (b) can further comprising delivering or administering an anti-tumor therapy or agent.

36. A kit comprising at least one agent selected from the group consisting of ECTa, ECTb, ATC07 $\alpha$ , ATC07 $\beta$ , ATC07 $\beta$ 1, and ATC07 $\beta$ 2 and instructions for use.